TRANSMITTAL OF APPEAL BRIEF (Large Entity)	Docket No. INTL-138 P6506

In Re Application Of: **ANIMESH MISHRA ET AL.**

Serial No.	Filing Date	Examiner	Group Art Unit
09/216,483	DECEMBER 18, 1998	N. MEHRPOUR	2682

Invention: **REMOTELY CONTROLLING ELECTRONIC DEVICES**

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on

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Signature

Dated: **JULY 6, 2001**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	ANIMESH MISHRA ET AL.	Group Art Unit:	2682
Serial No.:	09/216,483	Examiner:	N. Mehrpour
Filed:	December 18, 1998		
For:	REMOTELY CONTROLLING ELECTRONIC DEVICES	Atty. Dkt. No.:	INTL-0138-US (P6506)

Board of Patent Appeals & Interferences
Commissioner for Patents
Washington, D.C. 20231

APPEAL BRIEF

Sir:

Applicant respectfully appeals from the final rejection mailed June 13, 2001.

I. REAL PARTY IN INTEREST

The real party in interest is the assignee Intel Corporation.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF THE CLAIMS

Claims 7-24 and 26-28 are rejected. Each rejection is appealed.

IV. STATUS OF AMENDMENTS

All amendments are entered. See Paper No. 8.

Date of Deposit: 7/6/01
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V. SUMMARY OF THE INVENTION

A control system 10, shown in Figure 1, includes a processor-based system 12 that communicates with a remote control unit (RCU) 18. The system 12 may be a so-called set-top computer system that may work together with a conventional television receiver 14.

The RCU 18 may include a display 32, keypad 34 and a joy stick type navigation control 44. In addition, the RCU 18 may include a telephone off hook button 46 and buttons 50 and 52 that act as "on" and "off" controls for dedicated electronic devices such as the audio/visual receiver 16.

The RCU 18 may also communicate with a telephone base station 20, which may be coupled to a telephone line. The RCU 18 may include a telephone receiver. The RCU 18 may include buttons which enable the user to receive an incoming call through the RCU and to provide an off hook signal. The RCU 18 may communicate with the system 12 and a radio-frequency telephone base station 20 using radio-frequency technology.

Thus, when an incoming telephone call is detected, the RCU 18 may "answer" the telephone call either by communicating using a radio-frequency system with the base station 20 (with the telephone receiver removed) or the system 12. See specification at page 3, line 23 through page 4, line 21.

Referring to Figure 2, the RCU 18 may include a display 32 which in one embodiment of the invention may be a liquid crystal display. It may be useful, for example, for displaying the telephone number dialed from the RCU 18. A controller 26 may be coupled to a memory 39 and may be responsible for controlling the display 32 as well as an RF transceiver 30. The controller 26 may be processor-based and may be a microcontroller or a microprocessor, as examples. The RF transceiver 30 may send radio frequency voice information to the telephone base station 20

or to the system 12. The transceiver, in one embodiment of the invention, uses an internal antenna 29 that may be built into the RCU 18. The IR transceiver 28 may be used to communicate with the system 12 using a bidirectional infrared protocol such as the IrDA-C protocol in one embodiment of the invention. The IR transmitter 35 may be used to communicate with legacy devices 16 using a unidirectional protocol in one embodiment.

The controller 26 may also control the keypad 34 for allowing user input commands. A microphone 36 and speaker 38 enable telephone functions. A clock 37 and battery power supply 41 may also be provided. The power supply 41 may be removably coupled to a recharger 43 that may be contained, for example, in the system 12. While coupled to the system 12, the RCU 18 may be recharged. Advantageously, in some embodiments, RCU subsystems may enter a powered down mode when not in use. For example, the internal IR repeater modules 28 and 35 (if provided) may be powered down during RF (telephone) communications and vice versa.

A phase locked loop device 27 may be used to tune the RF transceiver 30 to a particular wireless telephone technology. For example, the user may be prompted to indicate what wireless technology (if any) is currently being used in the user's existing telephone system. For example, the user may then enter information that the user's telephone system uses a particular carrier frequency such as 27 MHz or 900 MHz. See specification at page 6, line 7 through page 7, line 17.

The PLL 27 is tuned to the particular frequency used by the model and brand of wireless telephone currently owned by the user. This tuning may be done in a number of ways. As one example, the page feature on many wireless phones may be activated to produce an RF carrier tone. The PLL 27 then frequency locks on the particular frequency of the user's telephone. The

transceiver communicates this frequency to the system 12 which locks to the same frequency. In this way, existing wireless telephones may be used with the system 12.

In the telephone set-up mode (Figure 5), the user is prompted (block 70), using a graphical user interface for example, to input a radio carrier wave frequency, which might be, for example 27 MHz or 900 MHz as conventional examples. The user may be prompted to input this information directly or alternatively to input wireless telephone brand and model information. This information may be transmitted from the RCU to the system 12. At the system 12, the telephone data may be compared to a database that correlates model and brand information to carrier frequency.

Next, the user may be prompted to generate a signal from the user's wireless telephone system (block 72). This may be done, for example, by operating the page feature and activating the PLL lock circuit 27 (block 74). The RCU 18 may detect the page and automatically analyze its carrier frequency using a PLL lock circuit 27, for example. The carrier frequency information may then be transmitted to the system 12. Even if the user inputs model and brand information it may be desirable in some cases to tune the lock circuit to the actual carrier frequency.

The system 12, having identified the carrier frequency of the user's existing wireless telephone system (block 76), may then cause the system 12 (and RCU 18) to adapt to the frequency of the existing system (block 78). This may be useful, for example, in allowing the system to operate through an existing telephone base station as desired, for example, when the system 12 is out of range. Once the system 12 is tuned to the existing wireless telephone system (if any), the RF sections of the RCU may be deactivated for power saving (block 80). See specification at page 7, line 8, through page 13, line 25.

When a telephone call is received, the system 12 awaits a command from the RCU to answer the call as indicated at diamond 82 in Figure 6. Once the command is received, the system 12 may determine whether an off hook signal has already been provided (diamond 84), for example by someone else picking up the handset of another telephone. If so, the user may be notified (block 86).

Otherwise, the system 12 produces an off hook signal (block 88) and enables bidirectional communication with the RCU (block 90). This may be done, for example, by activating the RF transceiver 30 of the RCU. The user may then use the RCU as a telephone handset.

When the user has completed the call, a button 46 may be operated terminating the call (diamond 92). This information is transmitted, by an IR command signal, for example, to the system 12 which disables the off hook signal and returns the telephone system to a state to receive an incoming call. See specification at page 13, line 26, through page 14, line 16.

VI. ISSUES

A. Are Claims 7-8, 10-21 and 24-29 Unpatentable Over Yeom et al.?

B. Are Claims 9 and 23 Unpatentable Over Yeom et al.?

VII. GROUPING OF THE CLAIMS

Claims 7-8, 10-21 and 24-29 may be grouped for convenience. Claims 9 and 23 may be grouped.

VIII. ARGUMENT

A. Are Claims 7-8, 10-21 and 24-29 Unpatentable Over Yeom et al.?

Claim 7 was rejected over the patent to Yeom under § 103 (Welty was only applied against dependent claims). In Yeom, an electronic device in a remote control unit and a

telephone system are provided as a single unit. Thus there is no need for the remote control unit to learn the carrier frequency of a wireless telephone associated with the system. That information is fixed into the device in Yeom upon manufacture.

In contrast, with the present invention, it is possible to use the remote control unit around a variety of different wireless telephone systems. In the present application, the remote control unit learns the carrier frequency of a proximate wireless telephone. It then tunes to that wireless telephone carrier frequency so that the remote control unit can communicate with the proximate wireless telephone. As a result, the user can receive telephone calls on the remote control unit.

Claim 7 calls for a detector to detect a carrier frequency of a proximate wireless telephone, the telephone unit being tunable to automatically tune to the carrier frequency of the proximate wireless telephone. The cited art is not tunable or automatically tunable.

In Yeom the carrier frequency is fixed to work with only a particular telephone. With the present application, the user can simply buy a computer system, for example, use the remote control unit to control the computer system and cause the remote control unit to learn the carrier frequency of the user's pre-purchased wireless telephone system. The remote control unit then automatically tunes to the detected wireless frequency.

In one embodiment set forth in the dependent claims, the ability to learn the carrier frequency of the proximate wireless telephone is aided by causing a page signal to be generated. This page signal may then be detected and used to discern the carrier frequency of the wireless telephone.

The argument set forth in the final office action suggesting that Yeom could "learn" the carrier frequency of another device is wholly unsupportable. Plainly, the rejection is unsubstantiated and should be reversed.

B. Are Claims 9 and 23 Unpatentable Over Yeom et al.?

Claims 9 and 23 were rejected under § 103 over Yeom et al. alone. Claims 9 and 23 call for the transceiver being tunable to the carrier frequency used by "another wireless telephone." Claim 7 (from which claim 9 depends), for example, calls for automatically tuning to the carrier frequency of a proximate wireless telephone. Claim 9 calls for the situation where the system tunes to the carrier frequency of a proximate wireless telephone and then subsequently tunes to the carrier frequency of still "another" wireless telephone. The structure shown Yeom et al. is fixed at one particular carrier frequency and thus does not have the structure to carry out the elements of claim 9.

Corresponding language is contained in claims 20 and 23.

Claims 9 and 23 patentably distinguish over the Yeom et al. reference and, therefore, the rejection should be reversed.

IX. CONCLUSION

Since the rejections of the claims are baseless, they should be reversed.

Respectfully submitted,

Date: 7/6/01

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APPENDIX OF CLAIMS

The claims on appeal are:

7. A remote control system for an electronic device comprising:

a first device including a processor and a radio frequency transceiver and an infrared transceiver, said processor arranged to control said infrared and radio frequency transceivers;

a remote control unit including a device to remotely control an electronic device and a telephone unit to enable remote communications with a telephone network, said remote control unit communicating with said first device; and

said telephone unit including a detector to detect a carrier frequency of a proximate wireless telephone, said telephone unit being tunable to automatically tune to the carrier frequency of the proximate wireless telephone.

8. The remote control system of claim 7 wherein said telephone unit includes a radio frequency transceiver adapted to remotely communicate with said telephone network.

9. The remote control system of claim 8 wherein said transceiver is tunable to the carrier frequency used by another wireless telephone.

10. The remote control system of claim 9 wherein said telephone unit includes a device which is automatically tuned to the frequency of another wireless telephone.

11. The remote control system of claim 7 including a repeater for forwarding a wireless transmission received from the first device to said electronic device.

12. The remote control system of claim 7 wherein said first device and said remote control unit are adapted to communicate both by radio frequency and infrared signals.

13. The remote control system of claim 12 wherein said first device and said remote control unit communicate via bidirectional infrared signals and said remote control unit communicates with said electronic device using unidirectional infrared signals.

14. The remote control system of claim 7 wherein said remote control unit is adapted to act as radio frequency transceiver for telephone communications with said first device.

15. The remote control system of claim 7 wherein said first device is a set-top computer system.

16. A method of completing a telephone call comprising:

enabling a user to control an electronic device using a remote control unit;

receiving a signal from a proximate wireless telephone;

determining the carrier frequency of the proximate wireless telephone; and

tuning the remote control unit to the carrier frequency so that the user can receive a telephone call through the remote control unit.

17. The method of claim 16 further including using a processor based system that detects an incoming call and produces an off hook signal.

18. The method of claim 17 further including converting signals from a telephone network into radio frequency signals and transmitting said signals to the remote control unit.

20. An article comprising a medium for storing instructions that enable a processor-based system to:

enable a user to control an electronic device using a remote control unit;

determine the carrier frequency of a proximate wireless telephone; and

in response to determining the carrier frequency of a proximate wireless telephone, tune the remote control unit to the carrier frequency so that the user can receive a telephone call through the remote control unit.

21. The article of claim 20 including instructions that cause a processor based system to prompt for a wireless telephone carrier frequency.

23. The article of claim 20 including instructions that cause a processor based system to use the carrier frequency of another wireless telephone.

24. The article of claim 20 including instructions that cause a processor based system to produce a telephone off hook signal when an incoming call is detected.

25. The article of claim 20 including instructions that cause a processor based system to receive infrared command signals in one format and to transmit infrared command signals in a second format.

27. The article of claim 20 further storing instructions that enable the processor-based system to prompt the user to issue a page from the user's wireless telephone.

28. The method of claim 16 further including prompting the user to issue a page from the user's wireless telephone.

29. The system of claim 7 further including a storage storing instructions that enable the processor to prompt the user to issue a page on the user's wireless telephone.